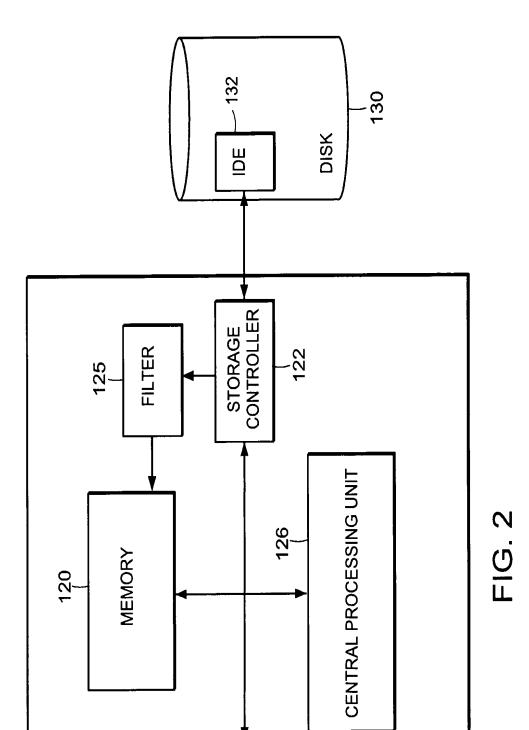
OIPE App No.: 10/646,522 Controlling Visibility in ... Docket/App No.: Title: Foster D. Hinshaw et al. JAH 2 0 2004 Inventors: RADE TRADE 112 1/19 DB\_SPU DB\_SPU RESOURCE USAGE MANAGER RESOURCE USAGE MANAGER 110 110 ORDER RELATIONS CALLS TO ACQUIRE CALLS TO ASSERT CALLS TO ACQUIRE ORDER RELATIONS CALLS TO ASSERT RESOURCES RESOURCES TRANSACTION MANAGER TRANSACTION MANAGER EXECUTION MANAGER EXECUTION MANAGER 111 QUERY 113 QUERY 113 SENDS NEW ORDER RELATIONS SENDS NEW ORDER RELATIONS SENDS NEW ORDER RELATIONS SENDS NEW ORDER RELATIONS SENDS A QUERY SNIPPET FIG. 1 CHECKS FOR SERIALIZATION CYCLES SERIALIZATION CYCLES QUERY EXECUTION MANAGER **TRANSACTION PANSACTION** QUERY EXECUTION CHECKS FOR MANAGER MANAGER MANAGER 101 101 SENDS NEW ORDER RELATIONS 103 103 CALLS TO ACQUIRE CALLS TO ACQUIRE ORDER RELATIONS ORDER RELATIONS CALLS TO ASSERT CALLS TO ASSERT RESOURCES RESOURCES SAGE MANAGER RESOURCE SAGE MANAGER RESOURCE -HOST -HOST

100

102

100

102



3/19

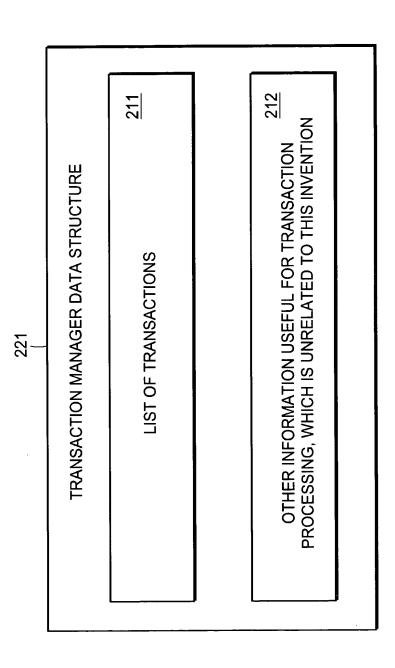


FIG. 3



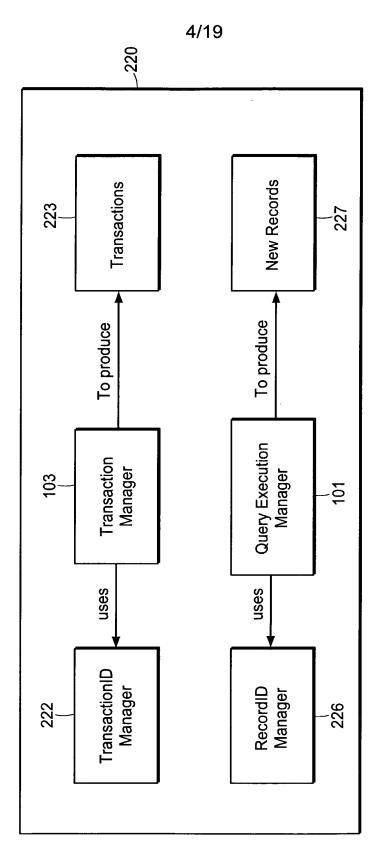


FIG. 4

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Docket/App No.: 10/646,522
Title: Controlling Visibility in ...
Inventors: Foster D. Hinshaw et al.

5/19 200 TRANSACTION DATA STRUCTURE - 201 TID STATE INFORMATION: INCLUDING WHETHER THE 202 TRANSATION IS ACTIVE, COMMITTED OR ABORTED **INVISIBILITY LIST** 204 NUMBER OF TIDs IN THIS LIST -203 205 NUMBER OF TIDS TREATED AS INVISIBLE 206 **VECTOR OF TIDs** TRANSACTION START TIME - 207 TRANSACTION END TIME - 208 -209 LOW WATER MARKS **HIGH WATER MARKS** - 210 OTHER INFORMATION USEFUL FOR - 211 TRANSACTION PROCESSING, WHICH IS UNRELATED TO THIS INVENTION

FIG. 5



6/19

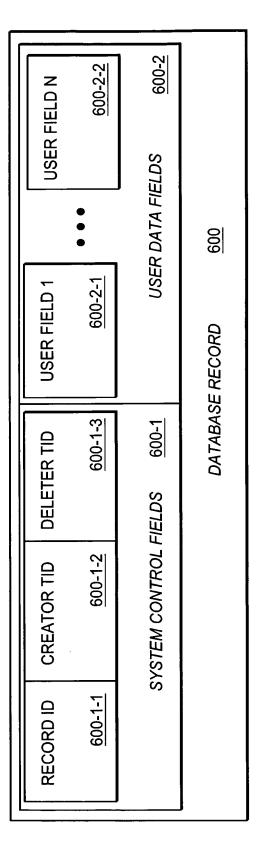


FIG. 6



	110-3-6	110-3-5	110-3-4	110-3-3	110-3-2	110-3-1
	85	MADHU	REDDI	0	1234	
7/19	110-2-6	110-2-5	110-2-4	110-2-3	110-2-2	110-2-1
	40	HENRI	LEROQ	0	1234	
	110-1-5	110-1-5	110-1-4	110-1-3	110-1-2	110-1-1
	100	LISA	SMITH	0	1234	



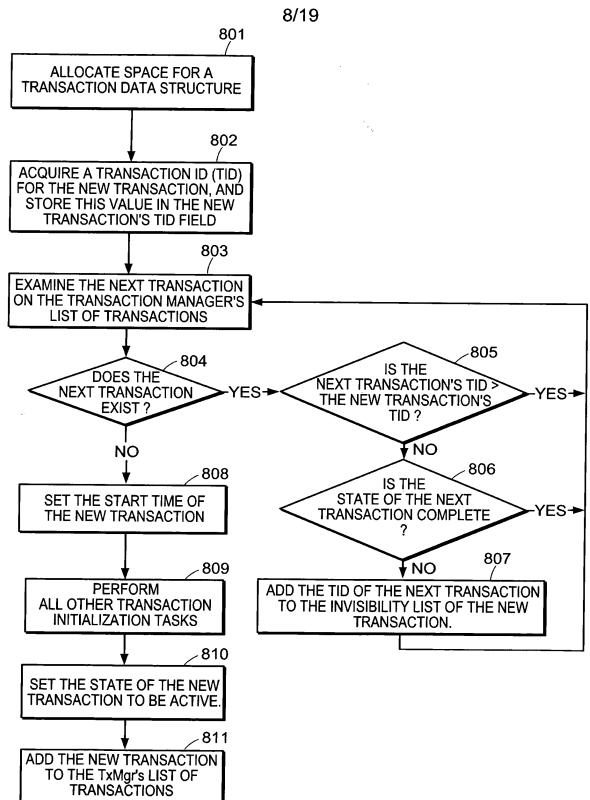


FIG. 8



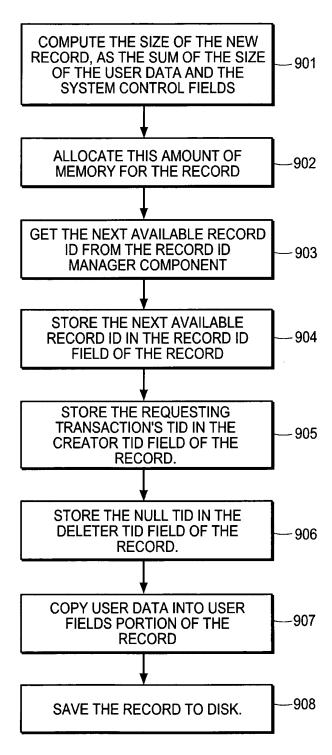
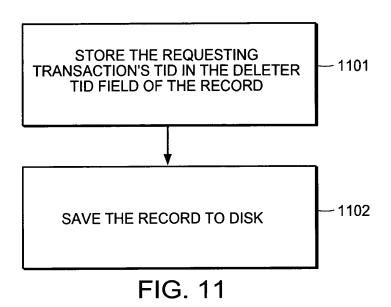


FIG. 9

		_							
100	110-1-5	40	110-2-6	98	110-3-6	96	110-4-6	75	110-5-6
FISA	110-1-5	HENRI	110-2-5	MADHU	110-3-5	VIKA	110-4-5	HENRI	110-5-5
SMITH	110-1-4	LEROQ	110-2-4	REDDI	110-3-4	KASILOVA	110-4-4	LEROQ	110-5-4
0	110-1-3	2000	110-2-3	0009	110-3-3	0	110-4-3	0	110-5-3
1234	110-1-2	1234	110-2-2	1234	110-3-2	4000	110-4-2	2000	110-5-2
-	110-1-1	2	110-2-1	ဧ	110-3-1	4	110-4-1	2	110-5-1



11/19



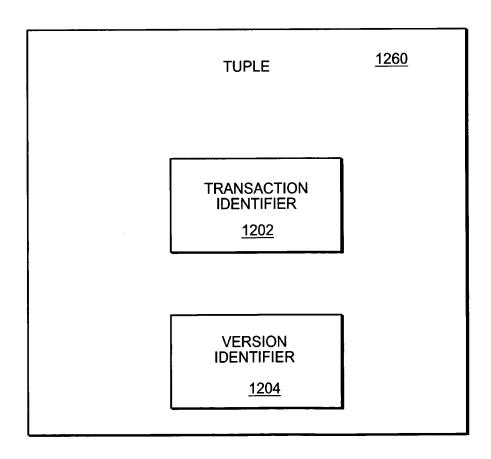


FIG. 12



12/19

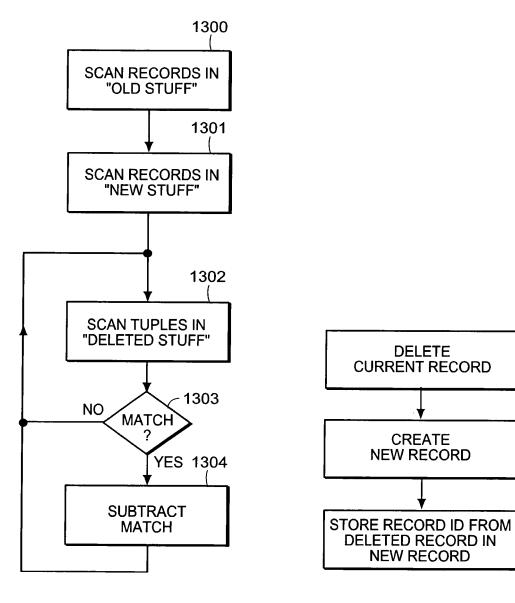


FIG. 13

FIG. 14

1400

-1401

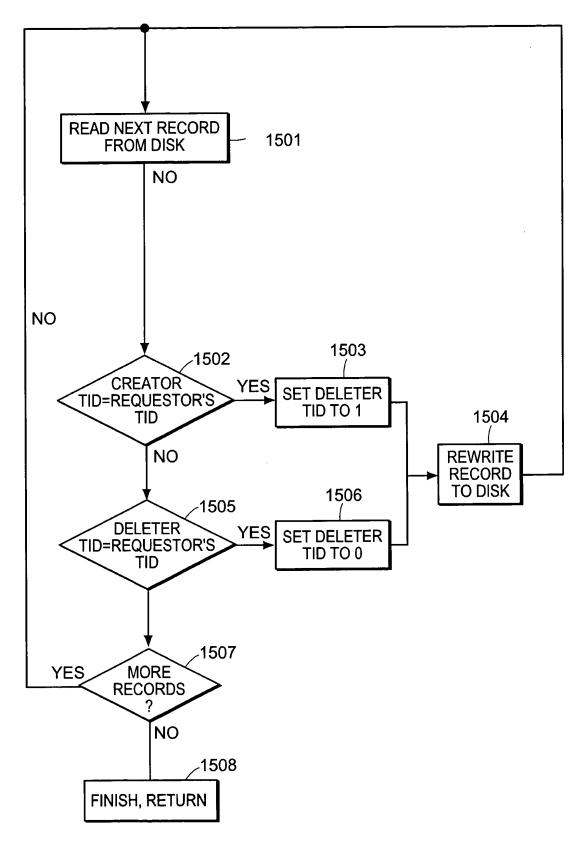
-1402

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Docket/App No.: 10/646,522
Title: Controlling Visibility in ...

Inventors: Foster D. Hinshaw et al.

13/19



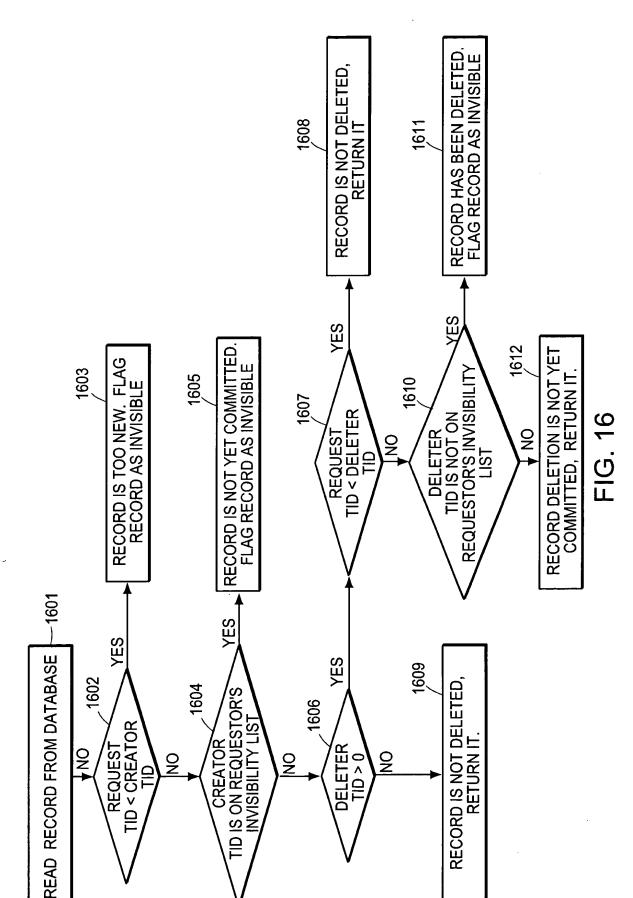
FIC 15



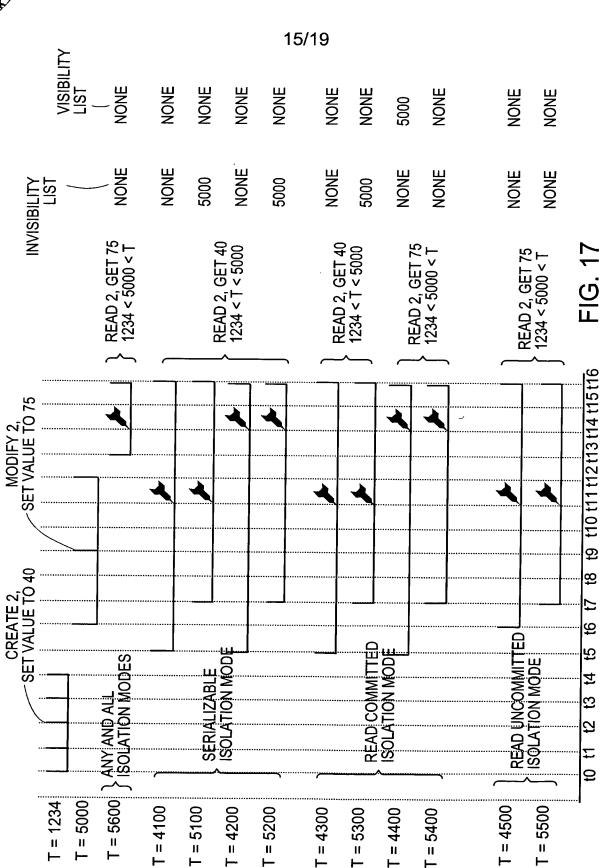
Docket/App No.: 10/646,522
Title: Controlling Visibility in ...

Inventors: Foster D. Hinshaw et al.

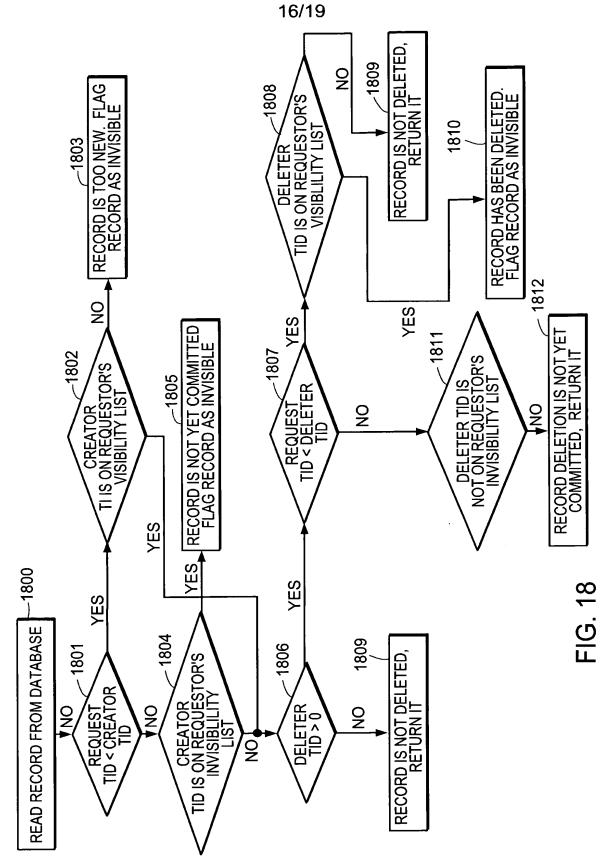




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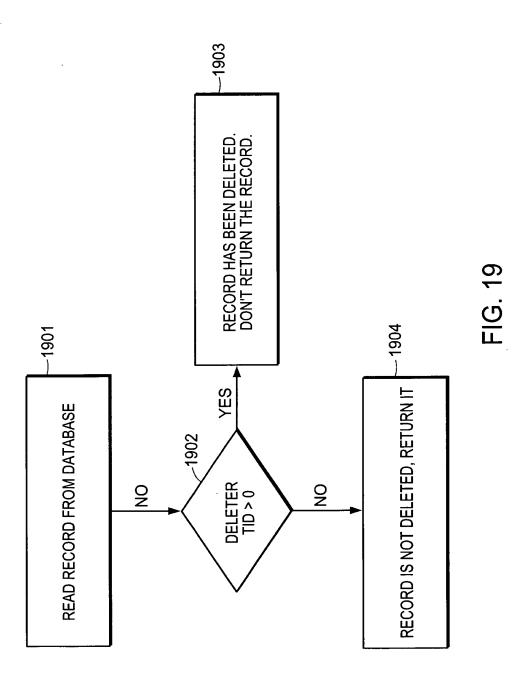








17/19





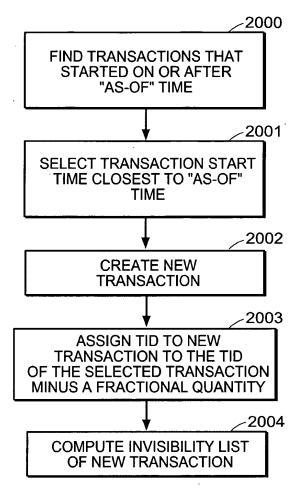


FIG. 20

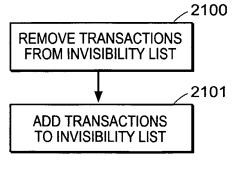


FIG. 21



19/19

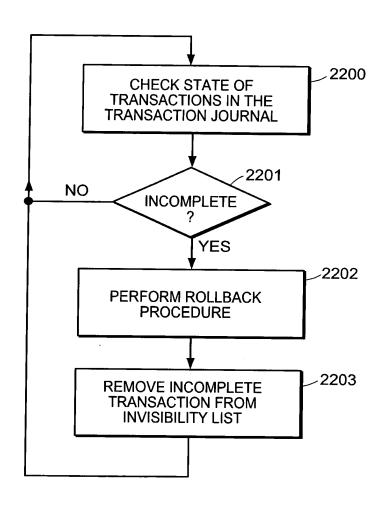


FIG. 22

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